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Livengood et al.

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(54) **COMPOSITIONS, METHODS AND USES FOR DENGUE VIRUS SEROTYPE-4 CONSTRUCTS**

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(71) Applicants: **Inviragen, Inc.**, Fort Collins, CO (US);
The United States of America as Represented by the Secretary of Health and Human Services, Washington, DC (US)

(58) **Field of Classification Search**
None
See application file for complete search history.

(72) Inventors: **Jill A. Livengood**, Fort Collins, CO (US); **Claire Y. Huang**, Fort Collins, CO (US); **Timothy D. Powell**, Fort Collins, CO (US); **Dan T. Stinchcomb**, Fort Collins, CO (US); **Jorge Osorio**, Mount Horeb, WI (US)

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Primary Examiner — Stacy B Chen

(74) *Attorney, Agent, or Firm* — Faegre Baker Daniels LLP

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(57) **ABSTRACT**

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Embodiments herein report compositions, methods and uses for dengue-4 (DENV-4) virus constructs. Some embodiments concern a composition that includes, but is not limited to, DENV-4 virus constructs alone or in combination with other constructs, can be used in a vaccine composition to induce an immune response in a subject. In certain embodiments, compositions can include constructs of more than one serotypes of dengue virus, such as dengue-1 virus, dengue-2 virus, or dengue-3 virus in combination with DENV-4 virus constructs disclosed herein. In other embodiments, DENV-4 constructs disclosed herein can be combined in a composition with other flavivirus constructs to generate a vaccine against more than one flavivirus. Other embodiments provide methods and uses for DENV-4 virus constructs in vaccine compositions that when administered to a subject induce an immune response in the subject against DENV-4 that is improved by modified constructs compared to other vaccine compositions.

(65) **Prior Publication Data**

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